L 38909-66

ACC NR: AP6019769

double aged at 450C for 25 or 50 hr and at 560C for 15 min. The tubes which underwent HTMT had considerably better mechanical properties, tensile strength of 136—148 kg/mm^2, elongation of 6—12%, and reduction of area of 12—24% than the conventionally heat treated tubes, tensile strength of 116—132 kg/mm^2, elongation of 1—6% and reduction of area 2—12%. The beneficial effect of HTMT is believed to be associated with improved properties of grain boundaries, the rapid cooling immediately after extrusion prevents the diffusion of impurities to grain boundaries. Also the α-phase particles precipitated during aging in alloy subjected to HTMT are much finer and more uniformly distributed than those in conventionally heat treated alloy. Orig. art. has: 2 figures and 1 table. [DV]

SUB CODE: 13, 11/ SUBM DATE: none

Card 2/2

L 4[illegible] [illegible](m)/[illegible]P(w)/[illegible](t)/ETI/[illegible](k) IJP(c) JD/[illegible]/EM/JH/JG

ACC NR: AP6028581 SOURCE CODE: UR/0129/66/000/008/0002/0006

AUTHOR: Bokshteyn, S. Z.; Giunashvili, D. A.; Gudkova, T. I.; Kishkin, S. T.

ORG: none

41
40
B

TITLE: Vaporization and pore 18 formation in aluminum 27 -zinc 27 and copper 27 -zinc alloys

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 8, 1966, 2-6

TOPIC TAGS: aluminum ~~zinc~~ base alloy, copper ~~zinc~~ base alloy, ~~alloy~~ vacuum sublimation, ~~[illegible]~~ porosity / IL68 copper ~~zinc~~ base alloy, V92 aluminum base alloy

ABSTRACT: Vaporization and pore formation in L68 brass (Zn—32%; Cu—68%), and V92 (Fe—0.15%; Mn—0.61%; Si—0.11%; Mo—4.18%; Zn—3.20%) and A (Zn—9.10%) aluminum-base alloys have been investigated at temperatures up to about 700C in a vacuum of 10^{-3}—10^{-6} torr. It was found that in copper-zinc alloy, the pores form in the whole volume of specimens, while in aluminum-base alloys, the pores form on the surface by vaporization of grain portions and even whole grains. The rate of vaporization 18 and pore formation was affected by stresses

Card 1/2 UDC: 669.7135:539.378.3

ACC NR: AP6028581

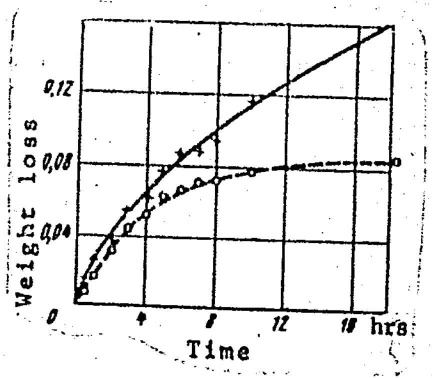

Fig. 1. Time dependence of weight loss at 750C for unstressed specimen (broken line) and a specimen under tension of 15 kg/mm^2 (solid line)

1

(see Fig. 1). The weight loss of an aluminum-alloy specimen under a tensile 16 stress of 0.3 kg/mm^2 in 20 hr at 500C was six times greater than that of an unstressed specimen. However, at 550C the effect of stresses on the vaporization rate was negligible. It was also established that in aluminum alloys, the pores form around structure defects, mainly at the grain boundaries. Therefore, electrolytically polished specimens vaporized more slowly and formed fewer pores than conventionally polished specimens. Tensile stress intensifies pore formation at the grain boundaries. In the subsequent stages, diffusion determines the rate of vaporization and pore formation. The amount of pores and the rate of their formation increases with a temperature increase; however, after the pores are formed, no significant increase in their size and number was observed with prolonged exposure time. With increasing zinc content, the amount of evaporated zinc and the number and depth of pores increase rapidly. Orig. art. has: 2 figures and 3 tables. [TD]

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 004/ ATD PRESS: 5063

Card 2/2

L 07382-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6027751 (N) SOURCE CODE: UR/0370/66/000/004/0139/0142

AUTHOR: Bokshteyn, S. Z. (Moscow); Kishkin, S. T. (Moscow); Moroz, L. M. (Moscow); Chaplygina, V. S. (Moscow)

ORG: None

34
B

TITLE: Characteristics of carbon diffusion in niobium

SOURCE: AN SSSR. Izvestiya. Metally, no. 4, 1966, 139-142

TOPIC TAGS: carbon, niobium, metal diffusion

ABSTRACT: The nature of carbon diffusion in niobium is studied as a function of structure and surface state. The specimens were melted in a vacuum arc furnace, forged and heat treated at 2000°C for 10 hours to produce a uniform structure and relieve internal stresses. Carbon diffusion was studied by autoradiography combined with microstructural analysis. The niobium specimens were diffusion saturated with radioactive carbon at 900°C for 2 hours. Three types of carbon diffusion measurement in the surface layer were compared: 1. directly after stabilizing annealing in a vacuum at 2000°C for 10 hours; 2. after stabilizing annealing and mechanical destruction of the surface layer by polishing the specimens on glass with abrasive powders of varying granularity and by preparation of a microsection; 3. in the oxidized surface of a microsection. It was found that considerable diffusion of carbon takes place along the

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UDC: 548.526

L 07382-67

ACC NR: AP6027751

O

grain boundaries of the niobium regardless of the state of the surface layer. The surface state has a considerable effect on volumetric diffusion. Annealed specimens show practically no volumetric diffusion while specimens with a polished surface show considerable mobility of carbon atoms within the niobium grains. This diffusion is considerably stronger along the subgrain boundaries than in the remainder of the grain volume. Analysis of the experimental results shows that carbon diffusion in niobium consists of three elementary processes: 1. diffusion of carbon in the crystal lattice of niobium; 2. reactive diffusion with the formation of a carbide phase; 3. diffusion of carbon in niobium carbides. The carbide phase is formed chiefly in defect sections of the structure: along the boundaries of grains and subgrains and also in the less perfect sections of the grain volume where diffusion is most intense. Orig. art. has: 1 table.

SUB CODE: 11,07/ SUBM DATE: 09Mar65/ ORIG REF: 006/ OTH REF: 005

Card 2/2 LS

ACC NR: AT6034450 (A) SOURCE CODE: UR/0000/66/000/000/0140/0143

AUTHOR: Gerchikova, N. S.; Kishkin, S. T.; Sorokina, L. P.

ORG: none

TITLE: Investigation of the effect of aging and deformation on the dislocation structure of austenitic steel

SOURCE: AN SSSR. Institut metallurgii. Svoystva i primeneniye zharoprochnykh splavov (Properties and application of heat resistant alloys). Moscow, Izd-vo Nauka, 1966, 140-143

TOPIC TAGS: austenitic steel, crystal lattice dislocation, metal aging, crystal lattice deformation

ABSTRACT: The composition of the steel investigated was the following: 37.33% nickel; 19.44% chromium; 3.16% tungsten; 0.09% carbon; 1.3% niobium; remainder iron. The initial thickness of the foil was 50 microns. A thinning treatment was carried out on a band of foil 25 x 150 mm in size. Heating was done at a temperature of 1080° for 30 min, and aging in the temperature interval 650-900°, in a vacuum with different holding times. From the aged bands were cut samples of special form which were subjected to elongations of 1, 4, and 6% at room temperature. It was established by the method of microdiffraction that, after quenching from 1080° in water, there can be

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ACC NR: AT6034450

observed the following carbide phases in the steel under investigation: niobium carbide (NbC) and a double carbide of the type Fe_3W_3C. After aging at a temperature of 650° for 8 hours, along with small black particles, diffused grey formations can be observed in the matrix. With an increase in temperature of aging to 700° (with the same holding time), the grey formations assume a more marked round form. In general, it is concluded that with a change in the degree of deformation there is a change in the configuration of the dislocations. With a small degree of deformation (1%) there are formed plane agglomerates, but with an increase in the degree of deformation up to 4%, a large number of short dislocations appear and the density of the dislocations increases. At the same degree of deformation, after aging at 700° for 8 hours, there appear packing defects. Increase in the degree of deformation up to 6% leads to interweaving of the dislocations in regions which do not contain particles, and to the accumulation of clusters of dislocations around the particles. Orig. art. has: 1 figure.

SUB CODE: 11/ SUBM DATE: 10Jun66/ OTH REF: 005

Card 2/2

ACC NR: AP7006207 (A) SOURCE CODE: UR/0363/67/003/001/0157/0166

AUTHOR: Bokshteyn, S. Z.; Kishkin, S. T.; Svetlov, I. L.

ORG: none

TITLE: High strength and the problem of filamentary crystals

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 3, no. 1, 1967, 157-166

TOPIC TAGS: construction material, sapphire, crystal, elastic modulus, fiber, whisker

ABSTRACT: The paper discusses the possibility of increasing the specific strength of construction materials by reinforcing them with filamentary crystals. Compositions based on such crystals possess a favorable combination of high strength and adequate plasticity. Fillers used in such compositions may be filamentary crystals of brittle nonmetallic compounds having a high elastic modulus, a high melting point, and a low density. One of the most promising fillers are sapphire whiskers. A theoretical analysis of the mechanism of reinforcement of a composition reinforced with discrete fibers is given, and the nature of the failure of such materials is discussed as a function of the length of the reinforcing fiber. Orig. art. has: 5 figures, 4 tables and 4 formulas.

SUB CODE: 11/ SUBM DATE: 27Apr65/ ORIG REF: 003/ OTH REF: 012

Card 1/1 UDC: 548:539.4

RAYEVSKAYA, M., domokhozyayka; KISHKINA, G.; PANARIN, K.; PROKOF'ICHEV, A., personal'nyy pensioner

Improve sanitary conditions in Chelyabinsk. Zhil.-kom. khoz. 10 no.5:18-19 '60. (MIRA 13:10)

1. Zaveduyushchaya sanitarnym otdelom gorodskoy sanitarno-epidemiologicheskoy stantsii, g. Chelyabinsk (for Kishkina). 2. Predsedatel'-postoyannoy komissii po kommunal'nomu khozyaystvu ispolkoma Soveta deputatov trudyashchikhsya Traktorozavodskogo rayona, g.Chelyabinsk (for Panarin).

(Chelyabinsk--Refuse and refuse disposal)

KISHKINA, K.I., mladshiy nauchnyy sotrudnik

Treating export lumber in bundles with antiseptics at the Archangel sawmills. Nauch. trudy TSNIIMOD no.11:127-138 '61. (MIRA 17:9)

1. Laboratoriya zashchity drevesiny TSentral'nogo nauchno-issledovatel'skogo instituta mekhanicheskoy obrabotki drevesiny.

KISHKINA, L.S.

Some remarks on the work of Legrain Pissard "On Collineations in Space" ("Sur les homographies de l'espace"). Uch. zap. MGPI 96:259-268 '60. (MIRA 16:7)

(Collineation)
(Geometry, Projective)
(Pissard, Legrain)

KISHKINA, L.S. (Tyumen')

Elementary proof of certain theorems on the projective scale.
Nom. sbor. no.2:141-144 '64. (MIRA 18:3)

L 47038-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD/JH

ACC NR: AT6024918 (A, N) SOURCE CODE: UR/2981/66/000/004/0085/0106

50 B+15

AUTHOR: Anisimova, N. V.; Archakova, Z. N.; Belyayev, S. Ye.; Danilov, Yu. S.; Kishkina, S. I.; Petrov, Ye. A.; Plekhanova, N. G.; Ponar'ina, T. K.; Radetskaya, E. M.; Strunin, B. M.

ORG: none

TITLE: Mechanical properties of VAD23 alloy

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat resistant and high-strength alloys), 85-106

TOPIC TAGS: aluminum alloy, solid mechanical property / VAD23 aluminum alloy

ABSTRACT: Sections and sheets of VAD23 alloy were tested in the artificially aged state (16 hr at 170°C). From the standpoint of creep, stress-rupture strength and recovered strength, the properties of VAD23 are 20-25% higher than those of D16T under long-term performance conditions at 125-150°C. In compression at temperatures up to 150-175°C, the yield points of sheets and sections of VAD23 are 10-20% higher than in extension. From the standpoint of endurance and fatigue strength, VAD23 is not inferior to V95 alloy. VAD23 has a high sensitivity to notching and sharp cracks; sheets of VAD23 alloy display a high sensitivity to notching and cracking as compared to pressed semifinished products. Orig. art. has: 12 figures and 14 tables.

SUB CODE: 11/ SUBM DATE: none / ORIG REF: 003/ OTH REF: 005

Card 1/1 vmb

L 40953-66 EWT(m)/EWP(w)/EWP(k)/T/EWP(t)/ETI IJP(c) EM/JH/HW/JD

ACC NR: AT6024920 (A) SOURCE CODE: UR/2981/66/000/004/0112/0119

AUTHOR: Kishkina, S. I.; Zilova, T. K.; Kadobnova, N. V.; Drozdovskiy, B. A.; Bubenshchikov, V. S.; Surkova, Yu. I.

54
53
B+1

ORG: none

TITLE: Stress-concentration and crack sensitivity of ATsM, ATsMU and AMg6 alloys and their welds

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat-resistant and high-strength alloys), 112-119)

TOPIC TAGS: aluminum alloy, high strength alloy, stress concentration, notch sensitivity, metal property, / ATsM aluminum alloy, ATsMU aluminum alloy, AMg6M aluminum alloy, AMg6N aluminum alloy

ABSTRACT: Hot-rolled ATsM, ATsMU, AMg6M and AMg6N alloy plates 10 mm thick, ATsM and ATsMU alloy forgings, ATsMU and AMg6M alloy extruded shapes, and welds of these alloys have been tested for stress-concentration and crack sensitivity. The sensitivity to stress concentration was evaluated on the basis of tensile tests with notched specimens stressed under an angle of 4—8° to the axis. Crack sensitivity was tested with Mesnoger specimens having artificial cracks 1.5 mm deep. In all cases, specimens of ATsM and ATsMU alloys were tested after

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ACC NR: AT6024920

aging at 90—100C for 100 hr. It was found that plates and extruded shapes of AMg6M alloy and their welds had low sensitivity to crack and stress concentration. The 20% strain-hardened AMg6N alloy plates were found to be crack and stress-concentration sensitive. The AMg6N alloy welds, however, had a low sensitivity to cracks and stress concentrations, identical to that of annealed plates and welds. Welds of high-strength ATsM alloy (tensile strength over 43 kg/mm^2) were found to be stress-concentration and crack sensitive. The results of these tests led to the conclusion that AMg6N (strain-hardened AMg6) can be used in large welded structures. The ATsM alloy is less suitable for such structures because of high sensitivity to stress concentrations and cracks. Orig. art. has: 2 figures and 3 tables. [TD]

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 002/ ATD PRESS: 5056

Card 2/2 hs

TUMANOV, A.T., zasluzhennyy deyatel' nauki i tekhniki RSFSR;
DAVIDENKOV, V.V., akademik; SERENSEN, S.V., akademik;
KURDYUMOV, G.V., akademik; BOCHVAR, A.A., akademik;
KISHKIN, S.T.; ZAYMOVSKIY, A.S.; SHCHAPOV, N.P., prof.;
KUDRYAVTSEV, I.V., prof.; VITMAN, F.F., prof.; KISHKINA,
S.I., prof.

IAkov Borisovich Fridman; on the fiftieth anniversary of his birth. Zav.lab. 27 no.7:919-920 '61. (MIRA 14:7)

1. Akademiya nauk USSR (for Davidenkov. Serensen). 2. Chleny-korrespondenty Akademii nauk SSSR (for Kishkin, Zaymovskiy).
(Fridman, IAkov Borisovich, 1911-)

KISHKINA, Z. M.

Kishkina, Z. Endomorphisms of p-primitive Abelian groups without torsion. Bull. Acad. Sci. URSS. Sér. Math. [Izvestia Akad. Nauk SSSR] 9, 201–232 (1945). (Russian. English summary) [MF 11129]

Let G be an Abelian group without elements of [illegible] a finite basis consisting of elements [illegible] Given a prime number p, th[illegible] if every element g of G satisfies a relation of the form $p^m g = k_1u_1 + \cdots + k_nu_n$ (where m and k_i are integers). The paper contains an exhaustive study of the endomorphisms of p-primitive groups. An isomorphism is established between the ring of endomorphisms of a p-primitive group of rank n and a certain ring of matrices of order n over the ring R of rational numbers whose denominators are [illegible]

Mathematical Reviews, Vol 8, No. 5

16(1),16(2)

AUTHORS: Kreynes,M.A., and Kishkina,Z.M. SOV/20-125-2-5/64

TITLE: On the Approximation by Functions of the Fifth Nomographic Order
(O priblizhenii funktsiyami pyatogo nomograficheskogo poryadka)

PERIODICAL: Doklady Akademii nauk SSSR,1959,Vol 125,Nr 2,pp 262-265 (USSR)

ABSTRACT: The authors construct an example: A nomographable function defined on the net, which can not be approximated by certain functions also nomographable and defined on the same net. There are 2 figures, 1 table, and 1 Soviet reference.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova (Moscow State University imeni M.V.Lomonosov)

PRESENTED: December 8, 1958, by A.N.Kolmogorov, Academician

SUBMITTED: November 24, 1958

Card 1/1

KISHKINA, Z.M.; KREYNES, M.A.

Nomographing of functions of several variables to within small quantities of higher order. Part I. Vest.Mosk.un. Ser. 1.: mat., mekh.16 no.6:38-45 N-D '61. (MIRA 14:11)

1. Kafedra matematicheskogo analiza Moskovskogo universiteta.
(Functions of several variables)
(Nomography(Mathematics))

33756
S/055/62/000/001/002/007
D299/D303

16.6500

AUTHOR: Kishkina, Z. M. and Kreynes, M. A.

TITLE: On the nomographing of functions of many variables to within infinitesimals of higher order. II

PERIODICAL: Moskva. Universitet. Vestnik. Seriya I. Matematika, Mekhanika, no. 1, 1962, 9-15

TEXT: Nomographing is considered of functions of 3 and of 4 variables. This article (Part II) is a continuation of Part I which appeared in no. 6, 1961, of the same periodical. Lemma 1: By means of a nomogram of type x,y; z; w), a function of type

$$w = x + z + yz + Dyz^3 + z^2(Ax^2 + 2Bxy + Cy^2) + o(\rho^4) \qquad (1)$$

where A, B, C and D are constants, can be always nomographed (in the neighborhood of the origin) to an accuracy of 4-th order in-

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D299/D303

On the nomographing ...

finitesimals; it can be nomographed to within higher-order infinitesimals, only if C = 0. This lemma is proved. Theorem 1: The function w = f(x,y,z), defined in the neighborhood of the point (x_0, y_0, z_0), k ($k \geqslant 4$) times differentiable at that point and satisfying the conditions

$$\left.\frac{\partial w}{\partial z}\right|_{x_0,y_0,z_0} \neq 0, \qquad \left.\frac{\partial(w,w'_z)}{\partial(x,y)}\right|_{x_0,y_0,z_0} \neq 0$$

can be always nomographed (by a nomogram of type (x,y;z;w)) to within 4-th order infinitesimals; it can be nomographed to within higher-order infinitesimals only if the partial derivatives up to the 4-th order inclusive, satisfy at the point (x_0,y_0,z_0) a special algebraic equation. Another theorem is stated, analogous to

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33756

On the nomographing ... S/055/62/000/001/002/007
D299/D303

Theorem 1. An example is given of a polynomial which cannot be nomographed to within 5-th order infinitesimals. Further, nomograms of functions of 4 variables are considered. A nomogram of type (x,y; s,t; w) is defined as the set of the 2 co-planar fields (x,y) and s,t) and of the scale (w), which satisfy certain properties. The function $w = N(x,y,s,t)$, determined by a nomogram of type (x,y; s,t,w), is defined on the set E_{xyst}. A nomogram of type (x, y;s,t;w) is considered. This nomogram is subjected to a projective mapping. Two lemmas are stated which lead to Theorem 3. This theorem states that the function $w = f(x,y,st)$ can be always nomographed to within 2-nd order infinitesimals, but to within higher-order infinitesimals only if the first 2 partial derivatives satisfy a certain condition. An example is given of a function of 4 variables, illustrating the theorem.

ASSOCIATION: Kafedra matematicheskogo analiza (Department of Mathematical Analysis)

SUBMITTED: December 28, 1960

Card 3/3

KISHKINA, Z.M.; KREYNES, M.A.

Example of a non-nomographable function. Usp. mat. nauk 19 no.6:
183-186 N-D '64 (MIRA 18:2)

TUMANOV, A.T., glav. red.; VYATKIN, A.Ye., red.; GARBAR, M.I., kand. tekhn. nauk, red.; ZAYMOVSKIY, A.S., red.; KARGIN, V.A., red.; KISHKIN, S.T., red.; KISHKINA-RATNER, S.I., doktor tekhn. nauk, red.; PANSHIN, B.I., kand. tekhn. nauk, red.; ROGOVIN, Z.A., doktor khos. nauk, red.; SAZHIN, N.P., red.; SKLYAROV, N.M., doktor tekhn.nauk, red.; FRIDLYANDER, I.N., doktor tekhn. nauk, red.; SHUBNIKOV, A.V., red.; SHCHERBINA, V.V., doktor geol.-miner. nauk, red.; SHRAYBER, D.S., kadn. tekhn.nauk, red.; GENEL', S.V., kand. tekhn.nauk, red.; NOVIKOV, A.S., doktor khoz. nauk, red.; KITAYGORODSKIY, I.I., doktor tekhn. nauk, red.; ZHEREBKOV, S.K., kand. tekhn. nauk, red.; BOGATYREV, P.M., kand. tekhn. nauk, red.; BUROV, S.V., kand. tekhn. nauk, red.; POTAK, Ya.M., doktor tekhn. nauk, red.; KUKIN, G.N., doktor tekhn. nauk, red.; KOVALEV, A.I., kand. tekhn. nauk, red.; ZENTSEL'SKAYA, Ch.A., tekhn. red.

[Building materials; an encyclopedia of modern technology] Konstruktsionnye materialy; entsiklopediia sovremennoi tekhniki. Glav. red. Tumanov, A.A. Moskva, Sovetskaia entsiklopediia. Vol.1. Abliatsiia - Korroziia. 1963. 416 p. (MIRA 17:2)

1. Chlen-korrespondent AN SSSR (for Kishkin).

KISHKO, A. M.

KISHKO, A. M.

"Treatment of Suppurative Pulmonary Conditions by Intratracheal Application of Penicillin." Rostov State Medical Inst, Rostov-on-Don, 1955. (Dissertation for the Degree of Candidate in Medical Sciences)

SO: M-955, 16 Feb 56

KISHKO, A.M., kand.med.nauk (Uzhgorod)

Care and treatment of patients with pulmonary hemorrhage. Med. sestra 16 no.11:21-23 N '57. (MIRA 11:2)
(LUNGS--DISEASES) (HEMORRHAGE)

KISHKO, A.M., kandidat meditsinskikh nauk

Treating patients with suppurative diseases of the lungs by intratracheal penicillin administration. Terap.arkh. 29 no.6: 36-37 Je '57. (MIRA 10:10)

1. Iz kafedry i kliniki terapii Uzhgorodskogo gosudarstvennogo universiteta.

(LUNG DISEASES, therapy,
suppurative dis., penicillin, intratracheal admin. (Rus))
(PENICILLIN, therapeutic use,
suppurative lung dis., intratracheal admin. (Rus))

KISHKO, A.M.

KISHKO, A.M. (Uzhgorod)

"Primary" acute pulmonary abscess. Klin.med. 35[i.e.34] no.1 Supplement:14 Ja '57. (MIRA 11:2)

1. Iz kafedry i kliniki gospital'noy terapii (zav. - prof. V.N. Slyshko) Uzhgorodskogo universiteta.
(LUNGS--ABSCESS)

Kishko A.M

TURKEL'TAUB, M.S., prof.; KISHKO, A.M., kand.med.nauk; TOROKHTIN, M.D.

Regional cerebral hypertension. Vrach.delo no.2:201 F '58.
(MIRA 11:3)

1. Kafedra propedevtiki vnutrennikh bolezney (zav.-prof. M.S. Turkel'taub) meditsinskogo fakul'teta Uzhgorodskogo universiteta.
(HYPERTENSION) (BRAIN--DISEASES)

KISHKO, A.M., kand.med.nauk (Uzhgorod)

Problem of the classification of pulmonary abscesses. Klin.med.
38 no.12:109-111 D '60. (MIRA 14:2)

1. Iz kafedry i kliniki terapii Uzhgorodskogo universiteta.
(LUNGS—ABSCESS)

KISHKO, A.M. (Uzhgorod)

Infectious hepatitis patients must be completely cured; letter to the editors. Vop. kur., fizioter. i lech. fiz. kul't. 27 no.5:462 S-O'62. (MIRA 16:9)
(HEPATITIS, INFECTIOUS)

KISHKO, A.M.; ROSHKOBICH, Yu.V. (Uzhgorod)

Vitamin E content of the blood serum in Botkin's disease.
Klin. med. 41 no.7:27-28 Jl'63 (MIRA 16:12)

1. Iz meditsinskogo fakul'teta Uzhgorodskogo universiteta.

KISHKO, G.

BALABAN, P.; UBAYDULLAYEV, Kh.; MIROLYUBOV, V.; KISHKO, G.; KIYASHCHENKO, V., laborant

Changes and improvements in the properties of clays. Stroi.mat., izdel. i konstr. 1 no.8:22-23 Ag'55. (MIRA 8:11)

1. Glavnyy inzhener Voroshilovgradskogo kirpichnogo zavoda no.21 (for Kishko)

(Clay)

GEL'MAN, I.I.; KISHKO, I.S.

Meterage method for determining the yield of cut articles from knitted fabrics. Tekst. prom. 24 no.11:71-72 N '64. (MIRA 17:12)

1. Ispolnyayushchiy obyazannosti glavnogo inzhenera Mukachevskoy trikotazhnoy fabriki (for Gel'man). 2. Glavnyy bukhgalter Mukachevskoy trikotazhnoy fabriki (for Kishko).

KISHKO, P.S.; YUDBOROVSKIY, I.M.

Beginning work on electric drilling of directionally drilled boreholes at the Lisichansk "Podzemgaz" Station. Podzem. gaz. ugl. no.3:37-41 '58. (MIRA 11:10)

1. Lisichanskaya stantsiya "Podzemgaz", Kontora opytnogo napravlennogo bureniya.
(Boring machinery) (Coal gasification, Underground)

BARDACHEVSKIY, V.T., kand.tekhn.nauk; KISHKO, R.S., inzh.

Formation of a trapezoidal current diagram for a reversing generator-motor system with the presence of transients. Elektrichestvo no.10:67-72 O '65. (MIRA 18:10)

1. L'vovskiy politekhnicheskiy institut.

L 09271-67 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) IJP(c)

ACC NR: AP6029889 (A) SOURCE CODE: UR/0413/66/000/015/0050/0051

19

INVENTORS: Bardachevskiy, V. T.; Kishko, R. S.

ORG: none

TITLE: Device for automatic control of electric servos. 9 Class 21, No. 184324

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 50-51

TOPIC TAGS: servomechanism equipment, automatic control equipment

ABSTRACT: This Author Certificate presents a device for automatic control of electric servos. The device contains a controlling amplifier whose feedback winding is connected in series to the emitter-collector circuit of a transistor at the input voltage proportional to the controlled quantity. The base-emitter circuit of the transistor is connected to a unit comparing this voltage to a reference voltage. To increase the control accuracy by automatically varying the feedback starting time, the comparison unit contains a tunnel diode connected through a variable resistance to the difference of the reference and input voltages (see Fig. 1).

UDC: 621.316.71.078-83

Card 1/2

L 09271-67
ACC NR: AP6029889

0

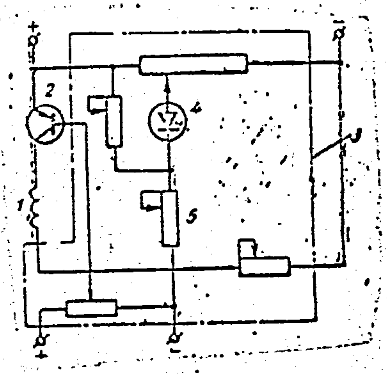

Fig. 1. 1 - feedback winding of controlling divider; 2 - switching transistor; 3 - comparison unit; 4 - tunnel diode; 5 - variable resistance

Orig. art. has: 1 diagram.

SUB CODE: 09/ 13/ SUBM DATE: 14May65

Card 2/2

KISHKO,S.M.; MILIYANCHUK,V.S.

Effect of the mercury arc light on the flame emission. Izv. AN SSSR Ser. fiz. 19 no.1:19 Ja-F '55. (MIRA 8:9)

1. Fizicheskiy fakul'tet L'vovskogo gosudarstvennogo universiteta.

(Spectrum analysis) (Spectrometer)

SOV/58-59-5-11712

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 5, p 257 (USSR)

AUTHORS: Kishko, S.M., Zapesochnyy, I.P.

TITLE: Some Results of Investigating Excitation Functions of Ionized Nitrogen Molecular Bands

21

PERIODICAL: Dokl. i soobshch. Uzhgorodsk. un-t, 1958, Nr 2, pp 49 - 50

ABSTRACT: The authors investigated the excitation functions of the (0,1) and (0,0) bands of the negative system of nitrogen in the visible region (4,728 and 3,914 Å). The measurements were carried out at a nitrogen pressure of 2 X 10^{-3} mm Hg in the excitation tube. The curve describing the excitation function for the (0,0) band has peaks at the following values of the electron accelerating potential: 18.5, 28.4, 51.8, 68.4, 85.0 and 95.0 v. The authors advance possible explanations for the observed peaks.

O.A.Sh.

Card 1/1

KISHKO, S.M.

109-3-19/23

AUTHORS: Kishko, S.M. and Zapesochnyy, I.P.

TITLE: Influence of Nitrogen on the Emission Characteristics of an Oxide Cathode (Vliyaniye azota na emissionnyye svoystva oksidnogo katoda)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol.III, No.3, pp. 433 - 435 (USSR).

ABSTRACT: The investigation reported was carried out in a special vacuum tube, consisting of a directly-heated cathode, an anode and a special electron-receiving electrode. The tube is shown diagrammatically in Fig.1. The electrodes and the cathode core were made of nickel foil. The oxide layer was produced by coating the core with an acetone solution of Ba-Sr carbonate; the coating was then activated. The current flowing to the receiving electrode (in μA) as afunction of the nitrogen pressure for 4 different tubes is shown in Fig.3. From this, it is seen that the emission capacity of the cathode is not appreciably affected by the presence of nitrogen provided its pressure is less than 10^{-2} mmHg; if the pressure is increased, the emission decreases very rapidly.

There are 3 figures and 5 references, 3 of which are English and 2 Russian.

Card1/2

ASSOCIATION: Uzhgorod State University (Uzhgorodskiy gosudarstvennyy

109-3-19/23

Influence of Nitrogen on the Emission Characteristics of an Oxide Cathode

universitet)

SUBMITTED: April 22, 1957

AVAILABLE: Library of Congress

Card 2/2

KISHKO, S.M. [Kyshko, S.M.]; KUCHINKA, M.Yu. [Kuchynka, M.IU.]

Effect of pressure on the excitation functions of certain bands for a negative system of the N_2^+ molecule. Ukr. fiz. zhur. 4 no.3:384-388 My-Je '59. (MIRA 13:2)

1. Uzhgorodskiy gosudarstvennyy universitet.
(Nitrogen--Spectra)

Kishko, S.M.

66702

24.2120

SOV/109-4-8-22/35

AUTHORS: Granovskiy, V.L., Luk'yanov, S.Yu., Spivak, G.V. and Sirotenko, I.G.

TITLE: Report on the Second All-Union Conference on Gas Electronics

PERIODICAL: Radiotekhnika i elektronika, 1959, Vol 4, Nr 8, pp 1339 - 1358 (USSR)

ABSTRACT: The conference was organised by the Ac.Sc.USSR, the Ministry of Higher Education and Moscow State University. It was opened by the chairman of the organising committee, M.A. Leontovich, Academician. During the plenary sessions of the conference, a number of survey papers were delivered. L.A. Artsimovich read a paper on "Production of Ultra-high Temperatures in Plasma".
A survey of the optical method of measurements was given in the papers by V.A. Fabrikant and S.E. Frish.
S. Brown of the Massachusetts Institute of Technology gave a survey of the high-frequency methods of the investigation of stationary and non-stationary plasma (see p 1244 in this issue of the journal).
N.V. Fedorenko read a paper entitled "Ionisation and Inelastic Scattering During Atomic Collisions". X

Card1/15

L.A. Sena and Yu.M. Kagan deal with "Elementary Processes of Determining the Motion of Ions in Gas".
A paper by Ye. Bedereu (Rumania) dealt with "The Role of Resonance--recharging in the Kinetics of Ions".
I.S. Stekol'nikov considered the initial stages of the development of sparks (corona-leader, main channel and the final channel).
B.N. Klyarfel'd gave a survey of the ignition processes of the discharges in highly rarified gases.
The mechanism of the breakdown of a high-vacuum gap was elucidated in a paper by V.L. Granovskiy.
L. Tonks (USA) expounded a theory of the motion of electrons in a magnetic trap (see p 1316 of this journal).
Academician R. Rompe (Eastern Germany) described a number of experiments on non-stationary plasma conducted by himself.
M. Stenbeck (Eastern Germany) gave a generalised theory of plasma. The conference was divided into six sections.
The first section was presided over by L.A. Sena and was concerned with the elementary processes in gas discharges.
The following papers were read in this section:
Ya.M. Fogel' - "Transformation of Positive Ions Into Negative Ones in Rarified Gases".
Ya. M. Fogel' with V.A. Ankudinov and D.V. Pilipenko - "Capture and Loss of Electrons During the Collision of Fast Atoms of Carbon and Hydrogen with the Molecules of Gases".
N.V. Fedorenko et al. - "Dissociation of Molecular Ions of Hydrogen During Collisions in Gas".
I.P. Flaks and Ye.S. Solov'yev - "Capture Cross-sections of Electrons in Multicharge Ions in Inert Gases".
R.M. Kushnir et al. - "Experimental Investigation of the Resonance Recharging in Certain Single-atom Gases and Metal Vapours".
O.B. Firsov - "Qualitative Investigation of Inelastic Collisions of Atoms".
L.M. Volkova - "Effective Excitation Cross-sections of the Spectral Lines of Potassium and Argon".

Card3/15

I.P. Zapesochnyy and S.M. Kishko "Some Results of the Investigation of the Optical Functions of the Excitation Bands of a Negative System".
A.A. Vorob'yev and A.G. Vlasov - "Investigation of the Scattering of the Electrons in a Betatron Chamber".
The second section was presided over by B.N. Klyarfel'd and was devoted to the problems of the electrical breakdown in rarified gases and in high vacuum. The following papers were read in this section:
G.Ya. Makar-Limanov and Yu.A. Metlitskiy - "Electrostatic Control of the Ignition of Glow-discharge Tubes" (see p 1274 of the journal).
S.V. Ptitsyn et al. were concerned with the breakdown in a high-voltage mercury rectifier (see p 1278 of the journal).
L.G. Guseva "Ignition of the Discharge in Non-uniform Fields at low Gas Pressures" (see p 1260 of the journal).
A.S. Soboleva and B.N. Klyarfel'd - "The Discharge Phenomena Between a Point and a Plane at Gas Pressures of 10^{-3} - 1 mm Hg".

24(7)

SOV/51-6-5-3/34

AUTHORS: Kishko, S.M. and Kuchinka, M. Ye.

TITLE: Excitation Functions of Certain Bands of the Second Positive System of N_2 (Funktsii vozbuzhdeniya nekotorykh polos vtoroy polozhitel'noy sistemy N_2)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 5, pp 580-582 (USSR)

ABSTRACT: Nitrogen molecules were excited with an electron beam having a current density in the order of 10^{-5}A/cm^2 at pressures from 10^{-3} to 4 x 10^{-3}mm Hg. These conditions ensured the absence of multiple collisions, collisions of the second kind, and step-wise excitation. The optical excitation functions were obtained for $0 \rightarrow 3(\lambda = 4059.4$ Å$)$, $1 \rightarrow 4(\lambda = 3998.4$ Å$)$ and $2 \rightarrow 6(\lambda = 4200.5$Å$)$ bands of the second positive system of N_2, corresponding to the transition $C^3\Pi \rightarrow B^3\Pi$. The apparatus used is shown in Fig 1. The nitrogen spectrum was excited in a discharge tube B. The tube contained a multi-electrode assembly consisting of a directly heated equipotential oxide cathode, two cylindrical anodes, a receiver for electrons and a shield cylinder. Inside the receiver three grids of nickel wire were used to capture the secondary and reflected electrons. The retarding potential method was used to establish that >90% of the electrons in the beam had energies within a range smaller than 1 eV, i.e. the beam could be considered to be monoenergetic. Molecular nitrogen was produced by

SOV/51-6-5-3/34

Excitation Functions of Certain Bands of the Second Positive System of N_2

decomposition of NaN_3 by heating. Purity of NaN_3 and N_2 produced from it were checked by spectral analysis. The electron-excited emission was collected by a lens K onto the entry slit 3 of a monochromator M (an ISP-51 spectrometer was used as the monochromator). A photomultiplier FEU-17 was placed behind the exit slit of the monochromator and the photocurrent was measured by means of a galvanometer M-21. Intensities of the three bands at 4059, 3998 and 4200 Å were determined at various energies of the exciting electrons ranging from 10 to 33 eV. The results are shown in Fig 2 in the form of excitation curves (band intensity v. accelerating voltage of the electron source). The excitation functions of the three bands obtained at 4.5 x 10^{-3} mm Hg had one maximum at 18 V (Fig 2). With increase of pressure to 10^{-2} mm Hg this maximum shifts to 17 V (Fig 3), due to multiple collisions. Acknowledgment is made to I.P. Zapesochnyy for suggesting the subject and directing the work. There are 3 figures and 3 references, 1 of which is Soviet, 1 translation from Russian into English and 1 mixed (German and English).

SUBMITTED: June 16, 1958

Card 2/2

24(7)

AUTHORS: Zapesochnyy, I. P., Kishko, S. M. SOV/48-23-8-7/25

TITLE: Some Results of the Investigation of the Excitation Functions of Bands of the Negative System N_2^+

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 8, pp 965 - 967 (USSR)

ABSTRACT: For various scientific and practical problems it is important to know the excitation functions of the atoms and molecules. It is ascertained that of the diatomic molecules only the excitation function of nitrogen and carbon monoxide has hitherto been investigated. The photographic- and photoelectric methods used in previous investigations are briefly dealt with and the experimental methods by which the intensities of the bands of N_2^+ were here determined, are described. Control experiments to clarify the influence of nitrogen pressure, the intensity of the electron excitation current, and other factors, were carried out to determine the conditions warranting the production of a non-distorted excitation function. Of the results the excitation curves for the wave lengths $\lambda = 4278$ Å and $\lambda = 3914$ Å

Card 1/2

Some Results of the Investigation of the Excitation Functions of Bands of the Negative System N_2^+ SOV/48-23-8-7/25

are shown in the diagram of figure 1. In the diagram of figure 2 two curves are shown for the beginning of the plateau of the excitation function of the 0 ⟶ 1 bands. With increasing pressure the maxima of these curves become level. Finally, the computation of the electron level is briefly dealt with. The authors thank S. E. Frish for his assistance and valuable advice. There are 2 figures and 9 references, 5 of which are Soviet.

ASSOCIATION: Uzhgorodskiy gos. universitet (Uzhgorod State University)

Card 2/2

KIShKO, S. M., Cand Phys-Math Sci — (diss) "The function of excitation of the bands caused by diatomic molecules in the visible spectrum," Uzhgorod, 1960, 6 pp, (Leningrad State University imeni A. A. Zhdanov)

(KL, 38-60, 106

Kishko, S. M.

26593

S/185/60/005/003/008/020
D274/D303

24.3420

AUTHOR: Kyshko, S.M.

TITLE: Excitation functions of CO and CO^+ bands in the visible region of the spectrum

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 5, no. 3, 1960, 375-378

TEXT: The excitation functions of CO and CO^+ were investigated by the photoelectric method, similar to that used by the author for N_2 and N_2^+ (Ref. 2: Optika i spektroskopiya, 8, 160, 1960) and (Ref. 3: 6, 580, 1959). Pure CO was obtained by vacuum heating of a mixture of zinc powder with $CaCO_3$. The pure gas was checked by the spectral method. The measurements were carried out at pressures below $4 \cdot 10^{-3}$ mm Hg and a current density smaller than 1 ma/cm², as under such conditions no multiple collisions take place between electrons and molecules in the discharge tube. The curves of the excitation functions of the bands (4 → 0), (5 → 0) and (6 → 0) of

Card 1/3

the system CO^+ are of the same form; they originate at values of about 17 v of accelerating voltage. All three curves have maxima at 24, 44, 72 and 100 - 105 v. A figure is given which shows the effect of pressure on the excitation function for the (5 - 0)-band. It is evident from the figure that at $0.5 \cdot 10^{-3}$, $0.8 \cdot 10^{-3}$ and $2 \cdot 10^{-3}$ mm Hg, the form of the excitation curves is independent of the presssure. At high pressure ($6 \cdot 10^{-3}$ and $8 \cdot 10^{-3}$ mm Hg) the effect of the pressure is considerable, and the curves have only one maximum. Further, the curves of the excitation functions of the ($1 \rightarrow 0$), ($1 \rightarrow 1$) and ($0 \rightarrow 0$)-bands of the Angstrom system CO, obtained at a pressure of $3 \cdot 10^{-3}$ mm Hg are shown: the curves originate at 11 v, and have only one maximum (at 20 v), which (in contradistinction to system N_2 of Ref. 3 (Op. cit)) is not very sharp and is quite at a distance from the excitation voltage of the band. It is concluded that all the bands of each system (ionized and neutral) have the same excitation functions. The form of the curves is not affected by differences in vibration transitions for the bands of a given system. The maxima of the CO^+ curves are apparently due

Excitation functions... 26593

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D274/D303

to the elementary processes which take place in the gas at different energies of the excitating electrons. The different course of the excitation functions of bands of neutral CO and N_2 molecules is explained by the different multiplet levels of these bands. There are 4 figures and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: F.P. Bundy, Phys. Rev., 52, 698, 1937.

ASSOCIATION: Uzhgorods'kyy derzhavnyy universytet (Uzhhorod State University)

SUBMITTED: September 16, 1959

Card 3/3

24,3400

68833

S/051/60/008/02/004/036
E201/E391

AUTHOR: Kishko, S.M.

TITLE: Photo-electric Determination of the Excitation Functions of the Negative-band System of N_2^+

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 2, pp 160 - 164 (USSR)

ABSTRACT: When a molecular gas is excited with an electron beam the intensity of the emitted bands depends on the electron energy. These dependences are known as excitation functions of the bands. The present paper describes determination of the excitation functions of the negative band system of N_2^+, emitted in the transition $B^2\Sigma \rightarrow X^2\Sigma$. Information on the apparatus and experimental technique is given in earlier work (Ref 10). In the present paper only the details of the photometer recording system are given. The photometer circuit (Figure 1) consisted of a photomultiplier FEU-17 (sensitivity 50 A/lumen) and a DC amplifier based on a 2E2P tube (when the input impedance was $3.3 \times 10^{10}\ \Omega$ the amplification

Card1/4

68883
S/051/60/008/02/004/036
E201/E391

Photo-electric Determination of the Excitation Functions of the Negative-band System of N_2^+

factor of the amplifier was 50 000). The tube in which excitation was carried out was filled with nitrogen produced by heating sodium azide (Ref 11). Molecular nitrogen ions were formed by the following process:

$$N_2 + e \rightarrow (N_2^+)^x + 2e$$

if the energy of the exciting electrons was greater than the excitation energy of the $B^2\Sigma$ state, equal to 18.7 eV. At a nitrogen pressure of 10^{-3} mm Hg, with an electron current density of 1 mA/cm^2 and an accelerating potential of 40 V, more than 90% of the beam electrons had kinetic energies which did not differ by more than 1 - 1.2 eV. The nitrogen pressure and the beam current did not affect the form of the excitation functions provided the pressure was below 4.5×10^{-3} mm Hg and the electron beam density was less than 3.3 mA/cm^2

Card2/4

68883

S/051/60/008/02/004/036
E201/E391

Photo-electric Determination of the Excitation Functions of the Negative-band System of N_2^+

(Figures 2,3). The author investigated the relative excitation functions of the $(0 \rightarrow 0)$ and $(0 \rightarrow 1)$ bands, whose edges were at 3 914.4 and 4 278.1 Å, respectively. Both excitation functions had five maxima: at 29, 49, 56, 67 and 85-90 eV (Figures 4,5). On gradual increase of the nitrogen pressure these maxima disappeared; for example, the structure of the $(0 \rightarrow 1)$ band excitation function disappeared above 4.5×10^{-3} mm Hg (Figure 6). The structure disappeared also when the spread of the kinetic energies of the incident electrons was increased; for example, at 10^{-3} mm Hg pressure and 1 mA/cm^2 electron density the maxima on the excitation function of the $(0 \rightarrow 1)$ band disappeared with the electron kinetic energy spread became 3.5 eV (Figure 7). Acknowledgments are expressed to S.E. Frish for his advice and to I.P. Zapesochnyy who directed this work.

Card3/4

KISHKO, S.M. [Kyshko, S.M.]

Excitation functions of certain CO and CO$^+$ bands in the visible region of the spectrum. Ukr.fiz.zhur. 5 no.3:375-379 My-Je '60.
(MIRA 13:8)

1. Uzhgorodskiy gosudarstvennyy universitet.
(Carbon monoxide--Spectra)

ZAPESOCHNYY, I.P., KISHKO, S.M.

Excitation function of moleculs of nitrogen and carbon monoxide in case of collision with electrons. Izv. AN SSSR. Ser. fiz. 24 no.8:953-955 Ag '60. (MIRA 13:8)

1. Kafedra optiki Uzhgorodskogo gosudarstvennogo universiteta.
(Collisions (Nuclear physics)) (Nitrogen)
(Carbon oxide)

82828

S/048/60/024/008/005/017
B012/B067

24.6200

AUTHORS: Zapesochnyy, I. P., Kishko, S. M.

TITLE: On the Excitation Curves of Nitrogen and Carbon Monoxide Molecules in the Collision With Electrons

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960, Vol. 24, No. 8, pp. 953-955

TEXT: The excitation curves of bands of the diatomic molecules, i.e., the dependence of the intensity of the bands on the energy of the exciting electrons have hitherto been little investigated. In his paper (Ref. 2) I. P. Zapesochnyy established that the actual shape of the optical excitation curves can be obtained only when repeated collisions, impacts of second type, and step-by-step excitations do not occur and when the beam of the incident electrons is sufficiently monochromatic. Under such conditions the experiments described here for measuring the excitation curves of bands of ordinary N_2 and CO-molecules are made in the visible range. The intensities were photoelectrically

Card 1/2

82828

On the Excitation Curves of Nitrogen and Carbon Monoxide Molecules in the Collision With Electrons

S/048/60/024/008/005/017
B012/B067

recorded. Experimental arrangement and measuring method were described in Ref. 3; here, only the results of the experiments are given. Fig. 1 shows the excitation curves of the bands 0→3, 1→4, 2→6 of the second positive system of N_2, Fig. 2 shows the bands 0→0 and 1→1 of the Ångstroem system of Co, and Fig. 3 shows the excitation curve of the bands of N_2 (0→3) in a relatively wide range of the electron velocities (up to 200 ev). In conclusion, it is established that in the spectral bands of ordinary N_2 and CO molecules no marked secondary maxima could be observed, although the relative intensities were measured with an accuracy of 2-5%. On the other hand, the excitation curves of the bands of ions of these molecules show a fine structure, i.e., they have strongly marked maxima (Ref. 5). There are 3 figures and 5 references: 4 Soviet and 1 British.

ASSOCIATION: Kafedra optiki Uzhgorodskogo gos. universiteta (Chair of Optics of the Uzhgorod State University)

Card 2/2

ZAPESOCHNYY, I.P.; KISHKO, S.M.

Complex structure of the functions of excitation bands for the molecular ions N_2^+, CO^+, and NO^+. Dokl.AN SSSR 134 no.2: 311-313 S '60. (MIRA 13:9)

1. Uzhgorodskiy gosudarstvennyy universitet. Predstavleno akad. A.N.Tereninym.

(Ions--Spectra)

S/081/61/000/020/006/089
B119/B147

AUTHOR: Kishko, S. M.

TITLE: Excitation function of NO$^+$ and CO molecules in the visible spectrum

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 13, abstract 20B84 (Dokl. i soobshch. Uzhgorodsk. un-t. ser. fiz.-matem. n., no. 3, 1960, 43 - 44)

TEXT: A previously described method (RZhKhim, 1959, No. 24, 84811) was used for the determination of the excitation functions (EF) of the bands 1-0, 1-1, and 0-0 of the Angstrom system of CO and the bands 4380, 4500, and 4880 Å of NO$^+$. Four peaks with positions coinciding in the three bands mentioned above, were established in the EF curves of NO$^+$, as in the case of NO$_2^+$ (RZhKhim, 1960, No. 8, 29656). Results for the EF of CO, are given in RZhKhim, 1961, 5B85. [Abstracter's note: Complete translation.]

Card 1/1

S/081/62/000/003/003/090
B151/B144

AUTHOR: Kishko, S. M.

TITLE: Optical functions of the excitation of biatomic molecules

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 3, 1962, 13, abstract 3B58 (Nauk. zap. Uzhgorodsk. un-t, v. 41, 1959, 262-270)

TEXT: From an analysis of available reports on investigations of the excitation functions (EF) of biatomic molecules, the conclusion is drawn that the EF's in these reports do not hold since the distorting effect of high pressures and current densities is not taken into account. It is shown that the EF's of biatomic molecules can be obtained without distortion with good monokineticity of the existing beam, only when the gas pressure is below $4 \cdot 10^{-3}$ mm Hg, and the density of the exciting electron beam is $\sim 10^{-3}$ a/cm^2. [Abstracter's note: Complete translation.]

Card 1/1

KISHKO, S. M.

34433
S/185/61/006/006/011/030
D299/D304

24.3500 (1137,1138)

AUTHORS: Zapisochnyy, I.P., Kyshko, S.M., Shevera, V.S., Fel'tsan, P.V., and Shimon, L.L.

TITLE: Spectroscopic investigation of excitation functions of atoms and molecules

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 6, no. 6, 1961, 770 - 773

TEXT: The experimental apparatus included a spectral device for separating the lines and bands, an electrophotometer with a photomultiplier, and tubes filled with gas and vapor. The experimental apparatus was described in detail in the references. It is noted that recording devices of high sensitivity were required; this was achieved by using a photomultiplier with a d.c. amplifier instead of a photographic plate. Another requirement which had to be met was homogeneity of the electron beam. In the references it was found that among secondary processes which cannot be neglected, cascade transitions have a considerable effect on the spectral lines of atoms. This fact was confirmed by the present investigation,

Card 1/3

S/185/61/006/006/011/030
D299/D304

Spectroscopic investigation of ...

conducted by the method of electron collisions. The excitation functions of cadmium-, natrium- and neon atoms were studied in detail, as well as those of diatomic nitrogen molecules and of nitric oxide and carbon monoxide. The measurements were conducted in the visible region of the spectrum, and for cadmium in the ultraviolet. A figure shows the following excitation functions of atoms: Na (λ = 5890, 5896 Å), Ne (λ = 5852 Å) and Cd (λ = 5086 Å). The investigated excitation function are characterized by the presence of several maxima, i.e. by fine structure (mainly due to the cascade transitions). The following excitation functions of diatomic molecules were investigated: of the second positive system of N_2 molecules and of the Ångstrom system of CO molecules, of the negative system N_2^+, of the comet system CO^+, and of a NO^+ system. A figure shows the excitation functions of the band of the second positive N_2 system, of the CO^+ system and of the NO^+ system, for electron energies between 10 and 150 ev. Whereas the excitation functions of bands of neutral molecules are of ordinary shape, those of molecular ions are of a complex structure, i.e. have several maxima. The most likely reason for the complex structure are

Card 2/3

KISHKO, S.M.; SKUBENICH, V.V.

Studying carbon dioxide bands during electronic excitation. Izv. AN SSSR. Ser. fiz. 27 no.8:1049-1051 Ag '63. (MIRA 16:10)

1. Kafedra optiki Fiziko-matematicheskogo fakul'teta Uzhgorodskogo gosudarstvennogo universiteta.

DADIOMOV, Yu.R., inzh.; KISHKO, V.I., inzh.; STARKOV, V.S., inzh.

Automatic log dropping on a sorting conveyor. Mekh. i avtom. proizv. 17 no. 3:32 Mr '63. (MIRA 17:9)

KISHKO, YA. G.,

POKROVSKIY, N.N.; KISHKO, Ya.G.; OSTRANITSA, A.P.

Attachment to IU.A.Krotov's apparatus for making a baceriological analysis of air in the field. Lab.delo 4 no.2:45-46 Mr-Ap '58. (MIRA 11:4)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny (dir. - kandidat meditsinskikh nauk S.D.Klyusko, nauchnyy rukovoditel' prof. L.A.Chernaya)
(AIR--BACTERIOLOGY)

KISHKO, Ya.G.

Method for bacteriological investigation of the upper layers of the atmosphere. Lab.delo 5 no.5:37-39 S-O '59. (MIRA 12:12)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny.
(ATMOSPHERE, UPPER--BACTERIOLOGY)
(SCIENTIFIC APPARATUS AND INSTRUMENTS)

KISHKO, Ya.G.

Specific composition of the microflora in high atmospheric layers. Mikrobiologiia 28 no.5:768-771 S-O '59. (MIRA 13:2)

1. L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny.
(AIR microbiol.)

KISHKO, Ya.G.

Hemolytic cocci in the air of the city Lvov. Zhur.mikrobiol.,epid. i immun. 30 no.12:37-39 D '59. (MIRA 13:5)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(AIR microbiol.)
(STREPTOCOCCUS)
(STAPHYLOCOCCUS)

KISHKO, Ya. G., Cand Med Sci -- (diss) "Study of the microflora of near-surface and high layers of the atmosphere." Moscow, 1960. 15 pp; (Academy of Medical Sciences USSR); 200 copies; price not given; bibliography at end of text (12 entries); (KL, 22-60, 144)

KLYUZKO, S.D.; KISHKO, Ya.G.; BERSHCHANSKIY, Yu.I.

Bacterial aeroplankton of the upper atmospheric strata in the winter. Vrach.delo no.1:75-76 '60. (MIRA 13:6)

1. L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny i L'vovskaya meteorologicheskaya stantsiya.
(LVOV--AIR--BACTERIOLOGY)

KISHKO, Ya.G.; FILIPPOV, V.I.

New apparatus for the bacteriological investigation of air at high altitudes. Lab. delo 6 no.5:51-53 S-O '60. (MIRA 13:9)

1. L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny (dir. S.D. Klyuzko, nachalnik A.G.Makarenko).
(AIR—BACTERIOLOGY)

KISHKO, Ya.G., nauchnyy sotrudnik

Influence of natural ultraviolet radiation on the bacterial aeroplankton of the air. Gig.i san. 25 no.1:11-15 Ja '60. (MIRA 13:5)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(AIR microbiol.)
(ULTRAVIOLET RAYS)

KISHKO, Ya.G.

Universal apparatus for determining micro-organisms, gaseous mixtures, and dust. Med.prom. 14 no.11:54-57 N '60. (MIRA 13:11)

1. L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny.
(AIR--ANALYSIS)

KISHKO, Ya.G.

Microflora of the air in L'vov. Mikrobiologiia 29 no.5:738-744 S-O '60. (MIRA 13:11)

1. L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny.
(L'VOV—AIR—MICROBIOLOGY)

KISHKO, Ya.G.

Bacteriological infestigation of clouds and air masses of various origins. Zhur. mikrobiol. epid. i immun. 31 no.2:90-94 D '60. (MIRA 14:6)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny. (MICROBIOLOGY)

KISHKO, Ya.G.

Method of studying airborne microflora by means of filtering materials. Lab. delo 7 no.3:37-38 Mr '61. (MIRA 14:3)

1. L'vovskiy nauchno-issledovatel'skiy institut epidemiologii, mikrobiologii i gigiyeny (dir. S.D.Klyuzko).
(BACTERIOLOGICAL LABORATORIES—EQUIPMENT AND SUPPLIES)

KISHKO, Ya.G.

Distribution of bacterial flora in the air over populated and remote areas. Mikrobiologiia 30 no.1:118-121 Ja-F '61. (MIRA 14:5)

1. L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny.
(LVOV—AIR—MICROBIOLOGY)

S/169/62/000/004/017/103
D228/D302

AUTHOR: Kishko, Ya. G.

TITLE: Sulfur dioxide and chlorine in the atmosphere at L'vov

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 4, 1962, 7, abstract 4B64 (Gigiyena i sanitariya, no. 1, 1962, 77-79)

TEXT: Sulfur dioxide and chlorine are present in the air of the city of L'vov in negligible amounts. It is noted that concentration grows when the humidity rises. The highest concentrations of chlorine occur at a relative humidity of 40 - 80%. /Abstracter's note: Complete translation./

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Card 1/1

ALEKSEVICH, Ya.I.; KISHKO, Ya.G., kand. med. nauk

Fluorescent anitbody technique in the detection of tetanus bacilli.
Voen-med.zhur. no.10:47-50 '64. (MIRA 18:5)

LIPKIN, M.Ye.; KISHKO, Ya.G.; URIN, A.I.; KOLOTILOVA, L.V.; IONOV, L.I.

Use of the fluorescent method for the detection of poliomyelitis and rabies viruses. Vop. virus. 10 no.1:26-29 Ja-F '65. (MIRA 18:5)

1. Institut epidemiologii, mikrobiologii i gigiyeny, L'vov.

KISHKO, Ya.G. [Kishko, IA.H.]; PERVACHENKO, S.V.; NOSACH, L.N. [Nosach,
L.M.]; MIKHAYLOVA, E.G. [Mykhailova, E.H.]; VANTSAK, N.P.

Study of adenoviruses of the types 3 and 5 in a tissue culture of cancer cells by the fluorescence method. Mikrobiol. zhur. 27 no.1: 5-10 '65. (MIRA 18:7)

1. Institut mikrobiologii i virusologii AN UkrSSR.

KISHKO, Ya.G. [Kishko, IA.H.]

Use of fluorescein isothyocyanate-labeled anticomplementary serum in the Goldwasser-Shepard reaction. Mikrobiol. zhur. 27 no.5:67-70 '65. (MIRA 18:10)

1. Institut mikrobiologii i virusologii AN UkrSSR.

KISHKO, Ya.G. [Kishko, IA.H.]

Electron microscopic immunoferritin method of virus research. Mikrobiol. zhur. 27 no.6:85-89 '65.

Fifth All-Union Conference on Electron Microscopy. Ibid.: 90-92 (MIRA 19:1)

1. Institut mikrobiologii i virusologii AN UkrSSR. Submitted December 7, 1964.

KISHKOVSKIY, A.N.

Roentgenodiagnosis of pulmonary hernias. Vest.rent.i rad. no.1:80-83 Ja-F '55. (MLRA 8:5)

1. Iz kafedry rentgenologii Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.
(LUNGS, diseases,
hernia, x-ray diag.)
(HERNIA,
pulm., x-ray diag.)

KISHKOVSKIY, A.N., (Kiyev)

Case of hemangioma of the rib. Ortop.travm.protez. Moskva,
no.1:83 Ja-F '55. (MLRA 8:10)

(ANGIOMA,
ribs)
(RIBS, neoplasms,
hemangioma)

KISHKOVSKIY, A. N.

"The Problem of X-ray Diagnosis of Acute Stomach Ailments," Voyenno-Med. Zhur., No. 6, p. 7, 1955.

KISHKOVSKIY, A.N.

Roentgenologic examination in bronzed skin. Vest. rent. i rad.
32 no.1:29-31 supplement '57 (MIRA 10:5)

1. Iz kafedry rentgenologii i radiologii Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.

(ADDISON'S DISEASE, ther.
role of x-ray of adrenal cortex)
(ADRENAL CORTEX, radiography
in Addison's dis.)

KISHKOVSKIY, A.N.

Some data on changes of the lymphatic system in acute radiation sickness; experimental study. Vest. rent. i rad. 33 no.6:80-81 N-O '58. (MIRA 12:1)

1. Iz kafedry rentgenologii i radiologii Voyenno-meditsinskoy ordena Lenina akademii imeni S. M. Kirova.
(LYMPHATIC SYSTEM, eff. of radiations on
x-ray, in rabbits (Rus))
(ROENTGEN RAYS, eff.
on lymphatic system in rabbits (Rus))

SLEPYAN, E.I., KISHKOVSKIY, A.N.

Roentgenographic method of studying the morphology of leaves and the outlook for its use. Bot. zhur. 45 no.5:695-703 My '60. (MIRA 13:7)

1. Botanicheskiy institut im V.L. Komarova Akademii nauk SSSR i Voyenno-meditsinskaya akademiya im. S.M. Kirova, Leningrad. (Leaves--Radiography)

SLEPYAN, E.I.; KISHKOVSKIY, A.N.

Use of radiography in the study of flowers. Bot.zhur. 45 no.7: 1009-1010 Jl '60. (MIRA 13:7)

1. Botanicheskiy institut im. V.L.Komarova Akademii nauk SSSR i Voyenno-meditsinskaya akademiya im. S.M.Kirova, Leningrad.
(Flowers--Radiography)

SLEPYAN, E.I.; KISHKOVSKIY, A.N.

Possible uses of X rays in the study of fruits. Bot. zhur. 45 no.9: 1309-1310 S '60. (MIRA 13:9)

1. Botanicheskiy institut im. V.L. Komarova Akademii nauk SSSR i Voyenno-meditsinskaya akademiya im. S.M.Kirova, Leningrad.
(Fruit--Radiography)

KISHKOVSKIY, A.N.

Functional and morphological changes in the lymphatic system in secondary chronic radiation sickness. Med.rad. 6 no.8:41-45 Ag '61. (MIRA 14:8)

1. Iz kafedry rentgenologii i radiologii Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.
(RADIATION SICKNESS) (LYMPHATICS)

YELASHOV, Yu.G.; KISHKOVSKIY, A.N. (Leningrad,K-9,Lesnoy prospekt,d.4,kv.11)
LINDENBRATEN, L.D.; PIKULEV, L.A.

Roentgenography with direct enlargement of the image. Vest. rent.
i rad. 36 no. 2:25-28 Mr-Ap '61. (MIRA 14:4)
(RADIOLOGY, MEDICAL)

L 12489-63 EWT(1)/EWT(m)/BDS AFFTC/ASD AR/K
S/177/62/000/008/001/003 53

AUTHOR: Kishkovskiy, A. N., Colonel of Medical Service; Docent

TITLE: Functional and morphological changes of some organs and systems during chronic radiation illness 17

PERIODICAL: Aviatsionnaya i voyenno-morskaya meditsina, no. 8, 1962, 39-40

TEXT: The diagnosis of chronic radiation illness caused by small levels of radiation of long duration depends largely on the knowledge of manifestations and of the pathogenetic mechanism of the illness in various periods of its development. A study was made of the broncho-lung system, the gastroenteritic tract, and the lymphatic system, whose affection is of significance in the clinical picture of chronic radiation illness and its complications. The work was done on 218 rabbits of which 193 were irradiated with small doses (5,10,25 roentgens) to a total of 800, 1000, and 1500 roentgens. Twenty-five rabbits were used as controls. The animals were observed for periods from several months to three and more years. The condition of the broncho-lung system, gastroenteritic tract, and lymphatic system were studied in various stages

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L 12489-63

S/177/62/000/008/001/003

Functional and morphological changes...

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of development of chronic radiation illness. The detailed observations and manifestations of the serious functional and morphological changes for the organs and systems, and in what stages and test conditions they are developed are given. In all systems the rise of pathologic changes were noted. For various stages of development of the illness, disturbances in one or the other systems predominated. In the initial period, disturbances of the gastro enteritic tract were more obvious, somewhat less in the broncho-lung system, and even less in the lymphatic system. In later stages, the mose significant functional and morphological changes were in the broncho-lung system; in the gastroenteritic tract at this stage they were of lesser degree. This study shows the significant effects on the indicated organs and systems during chronic radiation illness and the data can be useful, not only for diagnosis of chronic radiation illness, and its complications, but also for explanation of some peculiarities and thair pathogenesis.

Card 2/2

KISHKOVSKIY, A.N., polkovnik meditsinskoy sluzhby, dotsent.

Functional and morphological changes of some organs and systems in chronic radiation sichness; experimental research. Voen.-med. zhur. no.8:39-44 '62. (MIRA 16:9)
(RADIATION SICKNESS)

ACCESSION NR: AP3010676 S/0241/63/008/010/0065/0071

AUTHOR: Chalisov, I. A.; Kishkovskiy, A. N.

TITLE: Blastomogenic effect of thorotrast in experimental chronic radiation sickness

SOURCE: Meditsinskaya radiologiya, v. 8, no. 10, 1963, 65-71

TOPIC TAGS: thorotrast, thorotrast blastomogenic effect, radiation sickness, total body irradiation, lymphatic system, local thorotrast irradiation, malignant growth

ABSTRACT: The effects of repeated injections of the radioactive preparation thorotrast on the lymphatic system and injection sites in irradiated animals are studied. 210 rabbits of 245 were exposed to total body X-irradiation of 5, 10, and 25 r daily up to total doses of 800, 1000, and 1500 r. Thorotrast was injected repeatedly into soft tissues of the rabbits' feet in doses of 2-3 ml. Observations were made up to 3.5 yrs. Autopsies and microscopic investigations were made after the animals died. Findings show that almost all thorotrast is deposited at the injection site. This leads to chronic

ACCESSION NR: AP3010676

irradiation of the surrounding tissuos and causes loss of fur, hyperemia, edema, tissue necrosis, and thorotrast granulation growths. No tumors are found in the control animals. The local blastomogonic effect of thorotrast is enhanced by chronic radiation sickness rosulting from repeated X-irradiation. The combined effects of prolonged total body irradiation and local irradiation at injection sites produce favorable conditions for malignant growths. Orig. art. has: 2 figures.

ASSOCIATION: Kafedra rentgenologii i radiologii Voyenno-meditsinskoy ordena Lenina akademii imeni S. M. Kirova (Department of Roentgenology and Radiology of the Military-Medical Lenin Order Academy)

SUBMITTED: 18May63 DATE ACQ: 08Nov63 ENCL: 00

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Card 2/2